

CLAIMS

1. A heat exchanger adopting a four-pass structure, comprising:
 - a plurality of tubes disposed so as to distribute a coolant along a top-bottom direction over two rows to the front and rear along the direction of airflow;
 - a first upper tank portion communicating with the upper end of a group of tubes disposed in one of the tube rows;
 - a second upper tank portion communicating with the upper end of a group of tubes disposed in the other tube row;
 - a first lower tank portion communicating with the lower end of said group of tubes disposed in the one tube row;
 - a second lower tank portion communicating with the lower end of said group of tubes disposed in said other tube row;
 - a communicating passage that communicates between one end of said first upper tank portion and one end of said second upper tank portion;
 - a partitioning means for partitioning said first upper tank portion and said second upper tank portion at substantial centers thereof;
 - an inflow port communicating with the other end of said first upper tank portion, through which coolant from an outside source flows in; and
 - an outflow port communicating with the other end of said second upper tank portion, through which coolant flows out to the outside;
 - wherein an opening area at said inflow port is set smaller than an opening area at said outflow port.

2. A heat exchanger according to claim 1:
wherein the center of the opening at said inflow port is set at a position higher than the center of the opening at said outflow port.
3. A heat exchanger according to claim 1 or claim 2:
wherein the opening area at said inflow port is within a range of 25 ~ 65 mm².
4. A heat exchanger according to any of claims 1 through 3, utilized in a refrigerating cycle that includes a variable capacity compressor.